## ABSTRACT

The present invention is to provide a method which comprises providing a plant with characters of a repressor 5 and operator both constituting a gene expression inducing system with an actinomycete autogenous regulatory factor as an inducer by gene transfer and administering the actinomycete autogenous regulatory factor to the transformed plant to thereby induce the expression of a gene placed under the control of the operator at a site of 10 administration of the actinomycete autogenous regulatory factor. This method makes it possible to cause expression of a desired gene at a desired time and site, thus enabling even the production, in a plant, of a metabolite otherwise disadvantageous to the growth of the plant. It is also 15 useful in preventing transformant plants from spreading through the environment by controlling the fertility thereof.